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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/826,342

04/19/2004

Yoshinobu Tanaka

042336

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05/12/2008

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EXAMINER

SMITH, JEFFREY S

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

05/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/826,342	Applicant(s) TANAKA ET AL.	
	Examiner JEFFREY S. SMITH	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 3,6-8 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-5, 9, 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2, 4-5, 9 and 11-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For claim 1, the line storage means only stores one line of horizontal image data, yet the second resizing means acquires "image data" from the line storage means.

For claim 4, during the "thinning out," what is being thinned out?

For claim 5, the added average is based on an added average of what?

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-5, 9 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication Number 2002/0122198 filed by Tsue et al. ("Tsue) in view of U.S. Patent Number 6,094,226 issued to Ke et al. ("Ke").

For claim 1, the preamble is not given patentable weight. The first and second resizing means and the line storage means recite only "image data." Although the last

clause of claim 1 recites “adjacent block,” this term is vague and unrelated to “image data” recited in the previous elements. Nevertheless, in order to advance prosecution, a plurality of blocks will be addressed in the prior art. However, if applicant desires the preamble to be part of the claim, applicant should amend the claim elements to include the elements from the preamble. Until then, the preamble is not given weight.

For claim 1, Tsue processes blocks of pixels (paragraph 51) and in figure 1 shows a first resizing means for resizing said image data in a first direction (x direction enlargement); a line storage means capable of storing at least image data corresponding to one line along the first direction of the image data outputted from the first resizing means (m2 line portion image shift buffer); a second resizing means for resizing the image data outputted from said first resizing means in a second direction intersecting the first direction (y direction enlargement).

Tsue does not explicitly disclose that the second resizing means acquires image data of adjacent block from said line storage means.

Ke discloses that “Line buffer 232 provides a vertically adjacent pixel value (yp) to vertical scaling block 234” (col. 5 lines 28-55). It would have been obvious to one of ordinary skill in the art at the time of invention to store a line of vertically adjacent pixels from a vertically adjacent block in the line storage means of Tsue for the purpose of improved scaling of the image as taught by Ke in the abstract.

For claim 2, Tsue discloses a decoding means for decoding compressed and encoded image data block by block, the image data decoded at the decoding means being subjected to the resizing (paragraph 64).

For claim 4, Ke discloses "a thinning out in the first direction" in col. 5 lines 8-15.

For claim 5, Ke discloses "an added average in the first direction" in col 5.

For claim 9, Ke discloses a single line memory and "2-point interpolation in the second direction" in col 5 lines 28-42.

For claims 11-13, the ability to either apply or bypass a resizing process is within the ordinary skill in the art at the time of invention. The Examiner takes Official notice that a person of ordinary skill in the art at the time of invention is able to either apply or bypass a resizing process for resizing image data.

For claim 14, Tsue discloses that the line storage means has a capacity corresponding to a display region of an external display apparatus (printers 3a-3c).

Response to Arguments

Applicant's arguments filed January 30, 2008 have been fully considered but they are not persuasive.

Applicant states that claim 1 has been amended to make clear that "the line storage means may include more than one line memory having capacity for storing image data corresponding to one line," and that "the line storage means of the present invention in claim 1 stores image data corresponding to one line thereby reducing the capacity of line memory as compared to the line memory in Tsue which stores several lines of image data." These two statements are contradictory.

Applicant argues that the “application is referring to pixel thinning out as illustrated in at least Fig. 8B.” The rejection under 35 U.S.C. 112, second paragraph is to claim 4, not to the application. Fig. 8B is not recited in claim 4.

Similarly, “added average” of “outputting an average of a number of adjacent pixels” as illustrated in Fig. 8A and described on at least page 11 of the present application is not recited in claim 5.

With respect to the rejection of claim 1 based on 35 U.S.C. 103, applicant argues that Fig. 9B shows “the data of the lowest line thereof are stored to the line memory 3.” This element is not recited in claim 1, nor is Fig. 9B recited in claim 1. Applicant further argues that “the line storage means of the present invention of claim 1 stores image data corresponding to one line thereby reducing the capacity of line memory” which contradicts applicant’s previous statement that “the line storage means may include more than one line memory having capacity for storing image data corresponding to one line.” Also, the “line portion image shift buffer” shown by Tsue is “one line memory having capacity for storing image data corresponding to one line.” Similarly, the line buffer shown by Ke is “one line memory having capacity for storing image data corresponding to one line.”

With respect to claim 4, applicant argues that Ke does not disclose pixel thinning. However, pixel thinning is not in the claim and there is no basis for reading pixel thinning into the claim.

For claim 5, applicant argues that “outputting an average number of adjacent pixels as illustrated in at least Fig. 8A and described on at least page 11 of the present

application” is not disclosed in the prior art. However, “outputting an average number of adjacent pixels as illustrated in at least Fig. 8A and described on at least page 11 of the present application” is not in the claim and there is no basis for reading this limitation into the claim.

For claim 9, applicant argues that Ke discloses a weighted average rather than 2-point interpolation. However, 2-point interpolation is a weighted average, where each point is weighted by .5. Therefore, the weighted average of Ke includes 2-point interpolation as recited in claim 9.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY S. SMITH whose telephone number is (571)270-1235. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew W. Johns/
Primary Examiner, Art Unit 2624

JSS

May 9, 2008